VIT®

Vellore Institute of Technology

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SMARTBRIDGE

Modern Application Development(Java Spring Boot)

CAMPUS : VIT VELLORE

PROJECT TITLE: ONLINE FOOD ORDERING SYSTEM

Team.No : 110

Team Members :

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1. INTRODUCTION:

1.1 Overview

Food ordering is the process of ordering various type foods through websites and web applications. Nowadays everyone around the world has familiar with these kind of websites. These websites are very helpful for restaurants and customers. Customers can get their ordered food in the location where they given. In our project, we have designed the online food ordering system for ordering the food items from various restaurants. The roles of admin and user have also been defined for food ordering application. This project is implemented using HTML and CSS at the front end and MySQL database and Java Spring boot at the backend.

1.2 purpose

In this system user can search the wanted restaurants and also their favourite foods to order. Admin also can access the things such as manage food items, update ,delete and cart related access. The online food ordering system provides convenience for the customers that are nothing special but the general busy people of the society. It overcomes the demerits of the manual hotel or mess system and the old fashioned queuing system. This system enhances the readymade of foods.

2. LITERATURE SURVEY:

2.1 Existing problem:

The goal was investigating the variables that affect internet users' perceptions of online food ordering among university students in Turkey. Davis' Technology Acceptance Model (TAM), which he created in 1986, was used to analyze how the Web environment for ordering food was adopted. Along with TAM, three additional primary factors—Trust, Innovation, and External Influences—are included to the paradigm.[1]

In [2] it was analyzed that the proposed system would make it possible to reduce food wastage without using any manual effort and manpower. Some issues are considered together with storing and removing the images from the AWS database via the admin panel, but it has ultimately rectified the issue and were able to conduct CRUD operations on it

The intelligent voice food ordering system (IVFOS),[3] which is designed and implemented on the basis of Iflytek AIUI platform, combining speech recognition and semantic understanding technology so as to make the food ordering more convenient. It has also introduced a personalized recommendation mechanism to serve customers based on their historical ordering records. The practical application shows that our intelligent voice food ordering system has the characteristics of convenient usage and highly personalized food ordering experience.

The study's objective was to determine whether the application is user-centered and based on user requirements. This system developed all problems pertaining to every user that it includes. Almost anyone may use the program if they know how to use an Android smart phone. The various problems with Mess service will be resolved by this system. The implementation of an online food ordering system is done to assist and resolve significant issues for consumers. Based on the application, it can be said that: This system makes placing orders simple; it gives customers the information they need to place orders. Through the program, it is able to receive orders and change their data, and it also aids the administrator in managing all the Food system. [4]

2.2 Proposed Solution :

This extend gives a web-based Nourishment Requesting Framework that can be actualized utilizing Node.js and Spring Boot. The objective of this venture is to unravel the current challenges. The strategy of setting nourishment orders is rearranged and made more proficient much appreciated to the use of these systems by the framework. Clients have the capacity to scrutinize menus, yield orders, and make installments online, whereas proprietors of eateries have the capacity to effortlessly oversee their menus, keep track of orders, and handle installments.

3. THEORITICAL ANALYSIS:

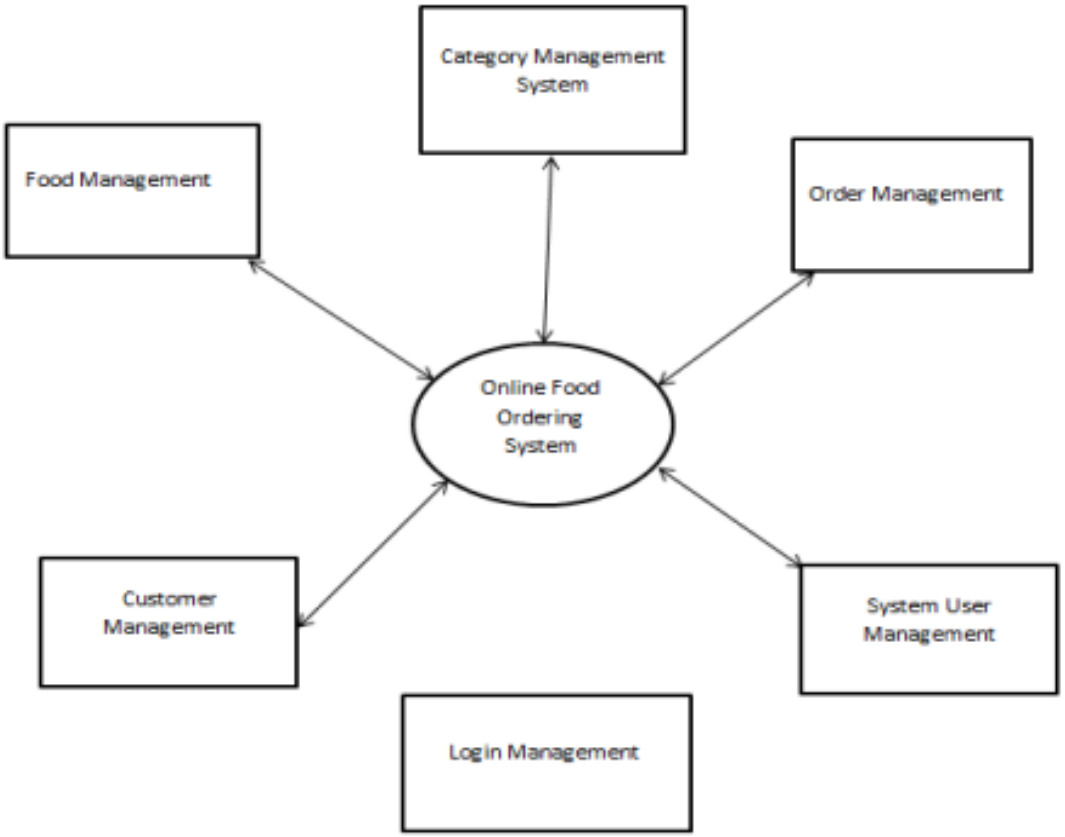
3.1 Hardware / Software designing:

- FrontEnd : Html,Css (Notepad++).
- BackEnd : MySql database and java Spring boot (Mysql , springboot Software designing).
- Spring Boot : Spring Boot accelerates the creation of Java applications by providing pre-defined configurations, automatic dependency management,

and a streamlined development environment. Using Spring Initializer or Spring Tools for your IDE, create a Spring Boot project.

- MySQL Database: A well-liked relational database management system is MySQL. Install the graphical database management tool MySQL Workbench along with MySQL Community Server.

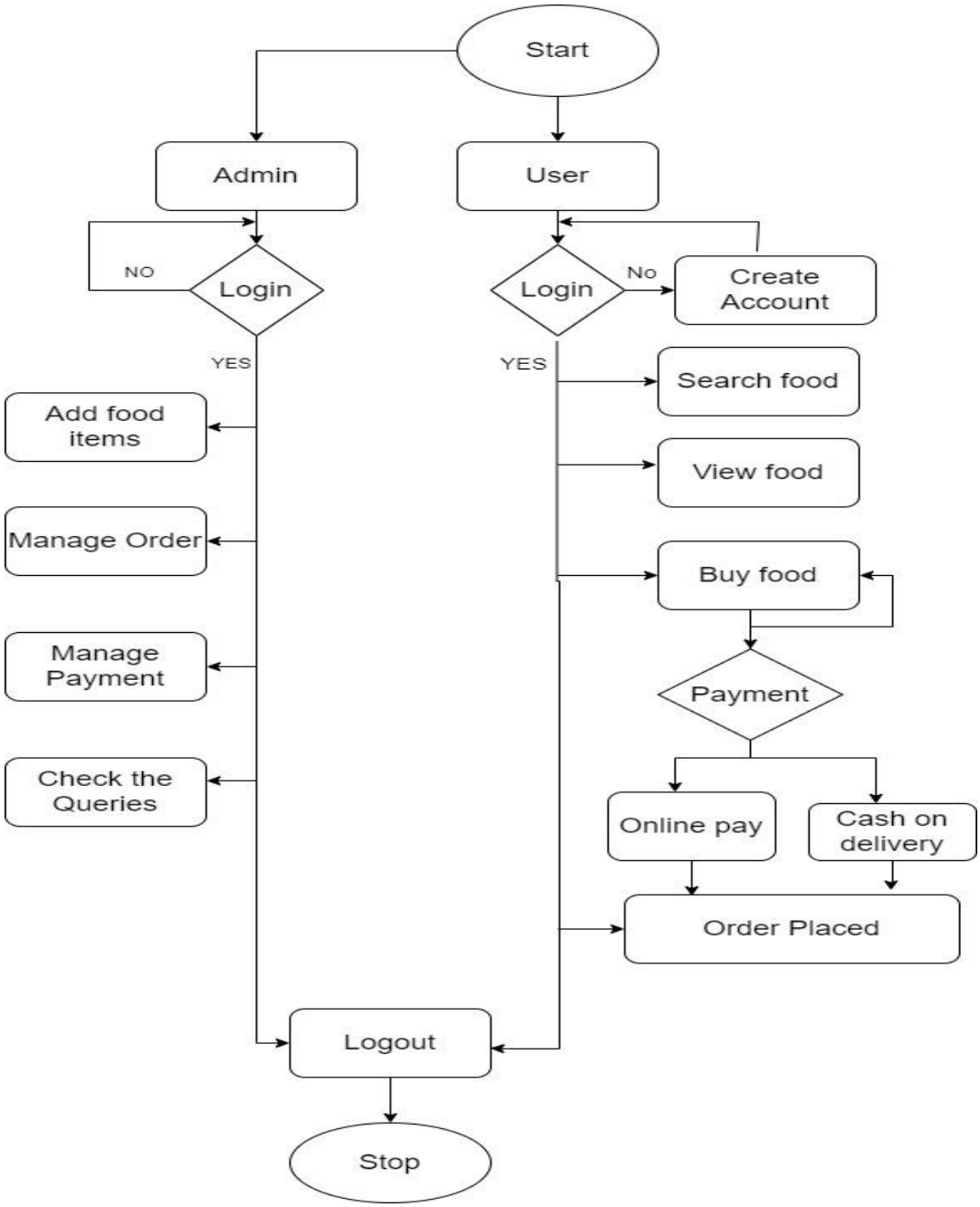
3.2 Block Diagram:



4 . EXPERIMENTAL INVESTIGATIONS:

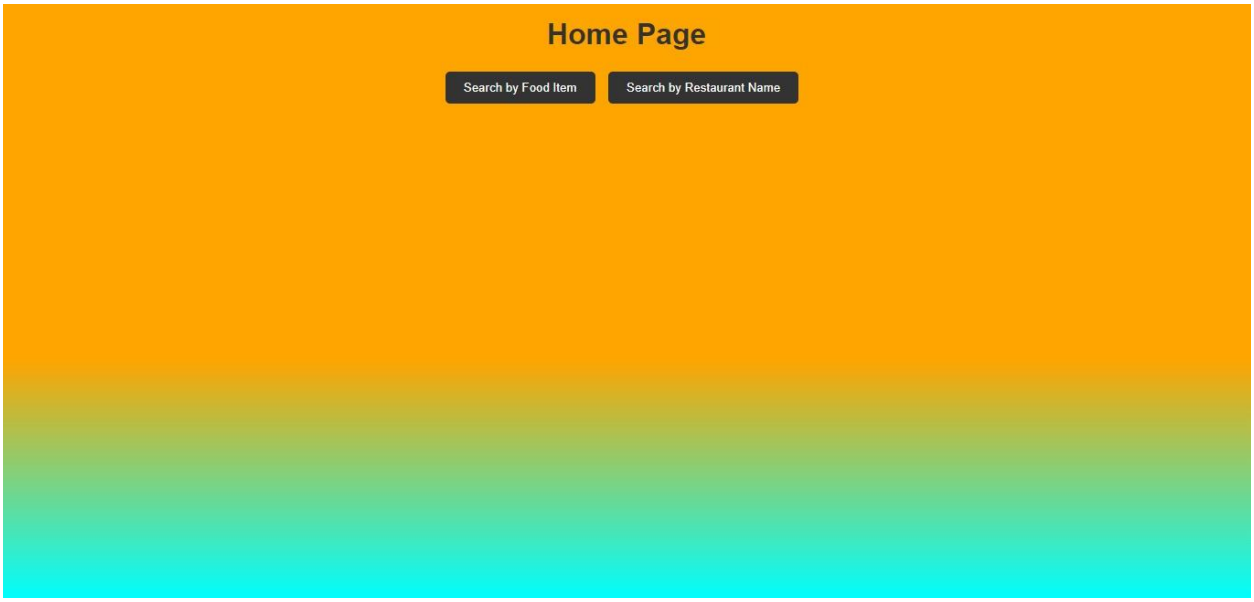
- Html: food ordering layout has been designed in html.
- CSS :Css has been used for all the designing part.
- JavaSpringBoot : All the business and backend API logic has been implemented in java spring boot.
- Testing the front-end and back-end components' flawless communication through integration.

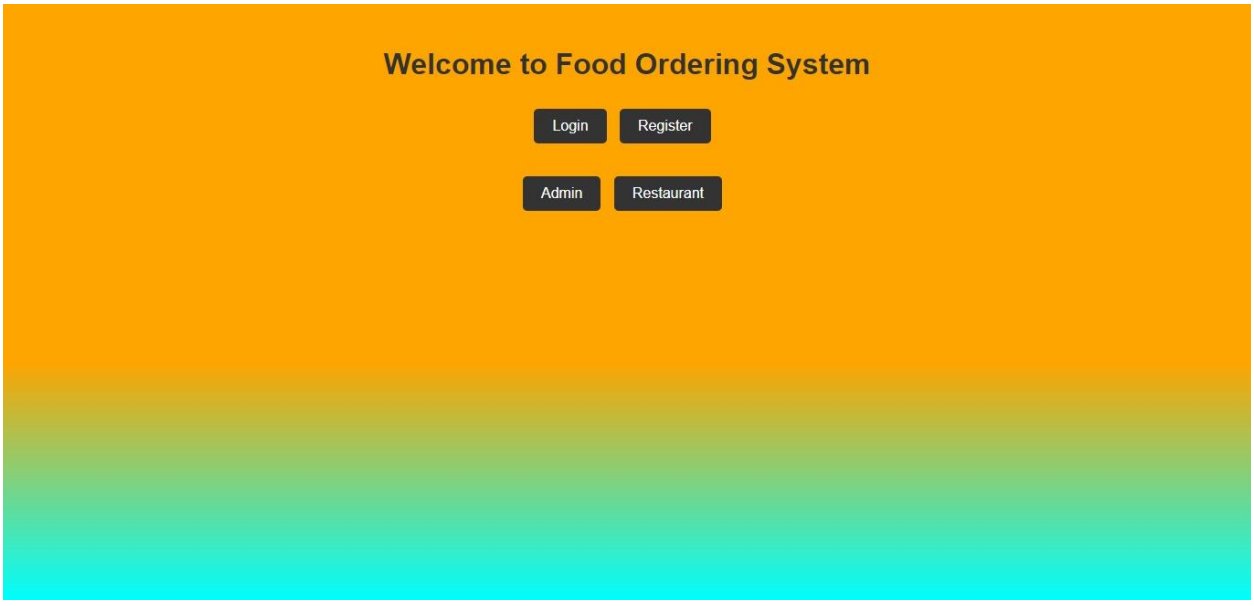
5.Flow Chart :


Start
Admin
User
NO
Login
Login
No
Create Account
YES
YES
Search food
Add food items
View food
Manage Order
Buy food
Manage Payment
Payment
Check the Queries
Online pay
Cash on delivery
Order Placed
Logout
Stop

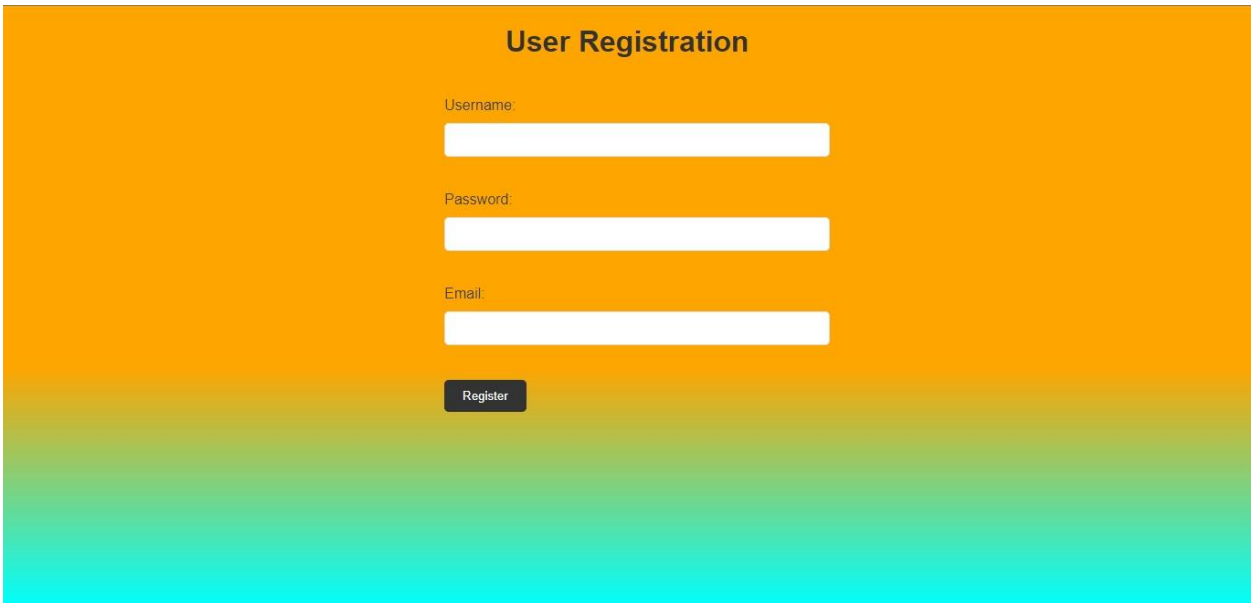
6.RESULT:

Home-Page:

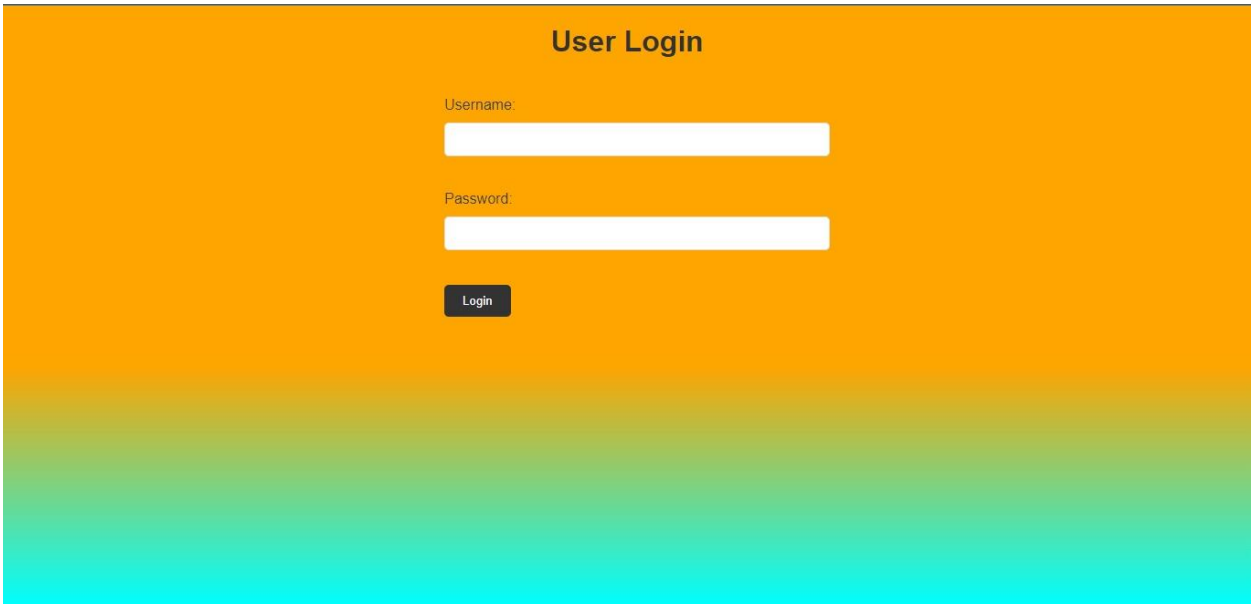




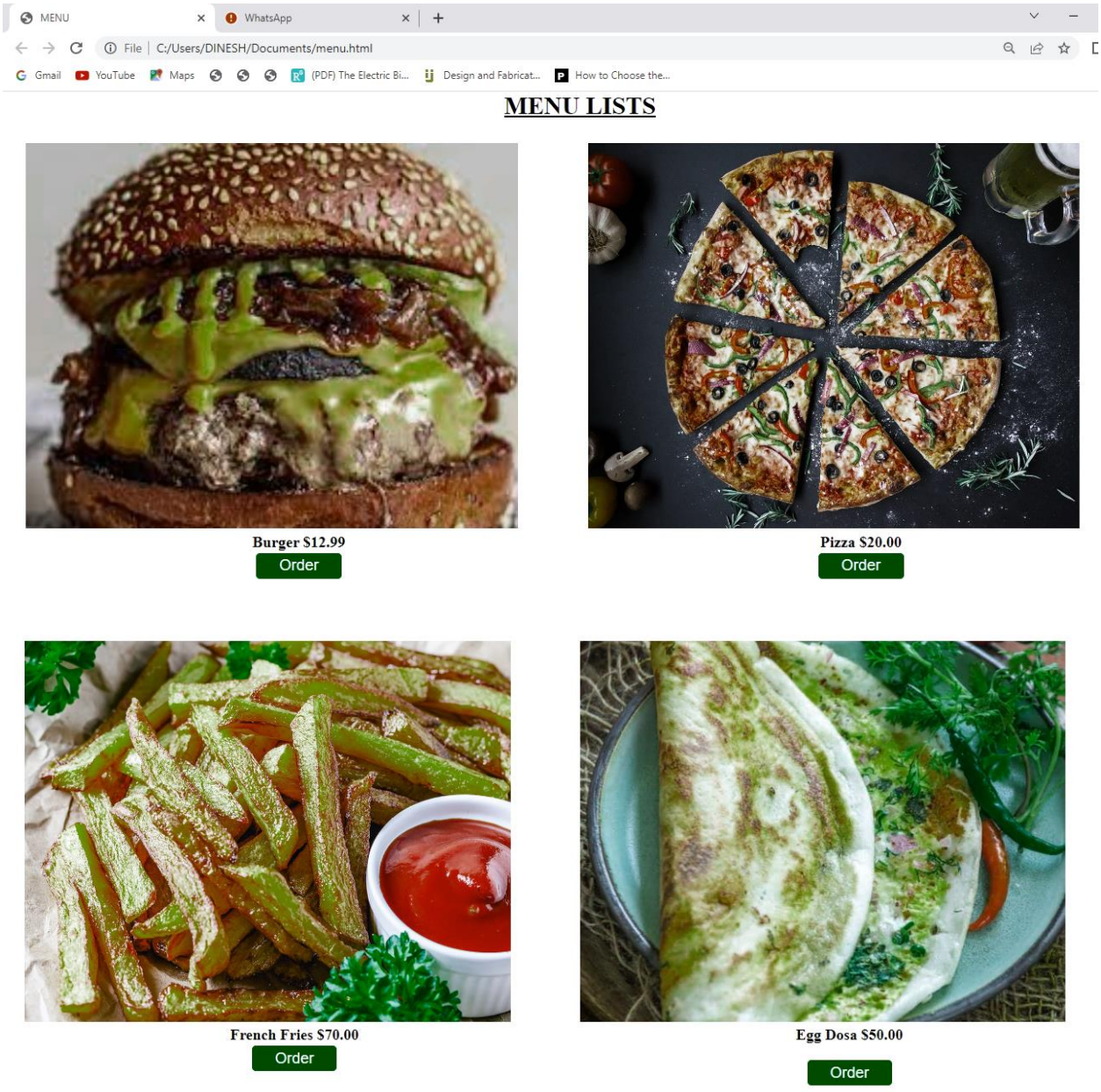
User Sign-Up Page:



User login Page :



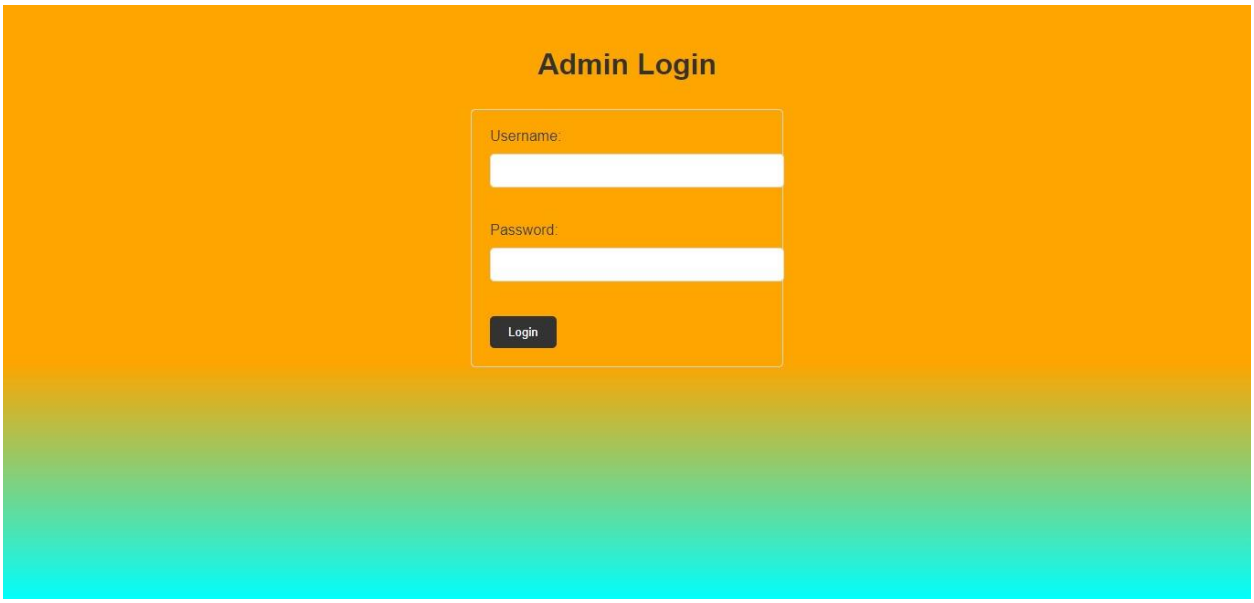
Menu page :

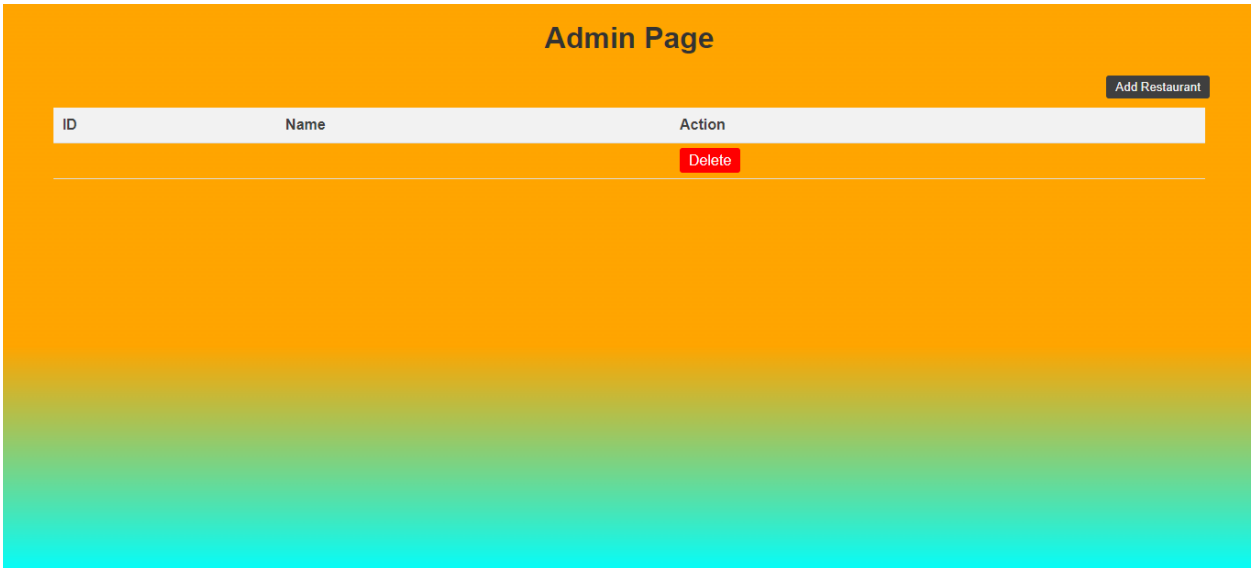

MENU
WhatsApp
File | C:/Users/DINESH/Documents/menu.html
Gmail
YouTube
Maps
(PDF) The Electric Bi...
Design and Fabricat...
How to Choose the...
MENU LISTS
Burger $12.99
Order
Pizza $20.00
Order
French Fries $70.00
Order
Egg Dosa $50.00
Order

Search food items

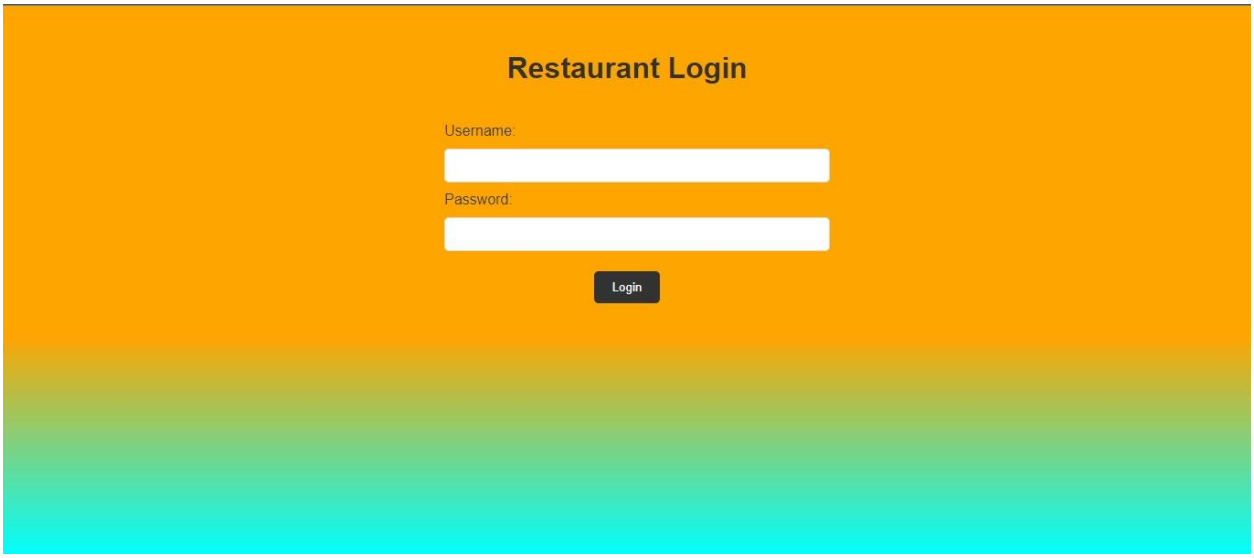
Search restaurants

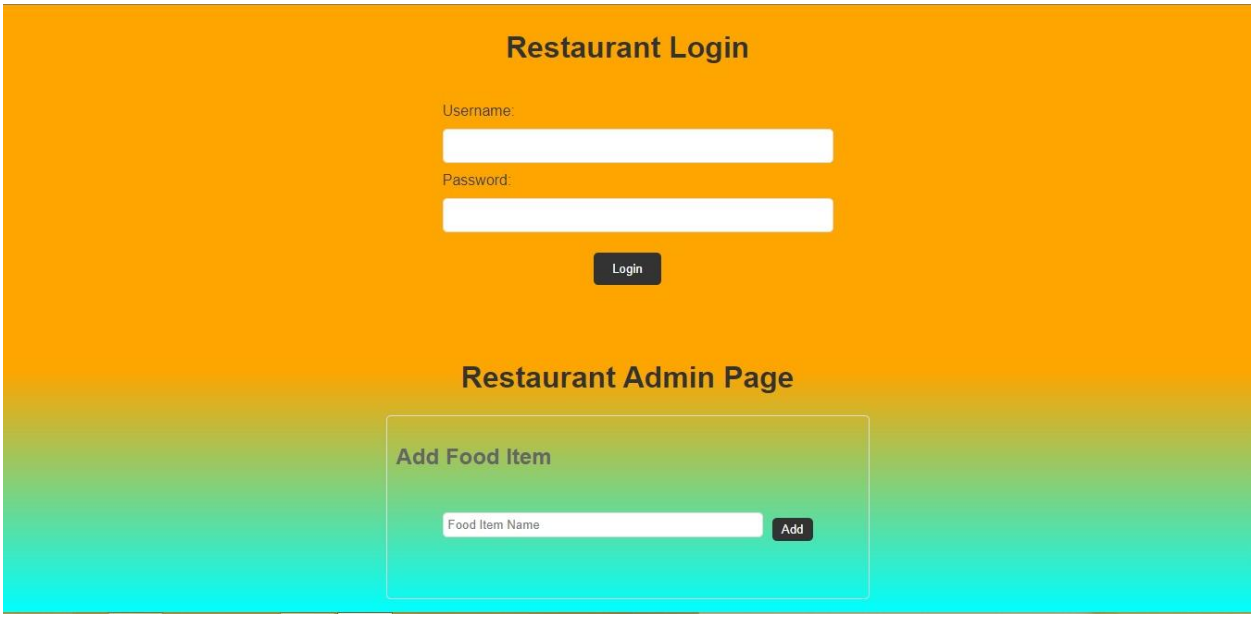
Admin:

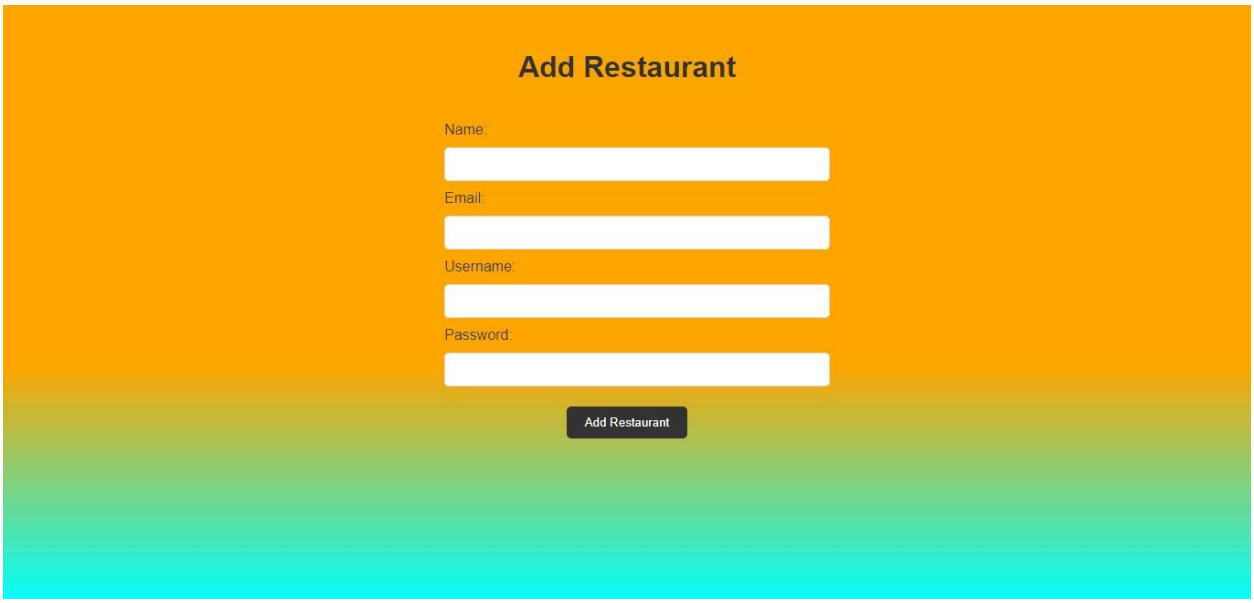

Admin Login
Username:
Password:
Login

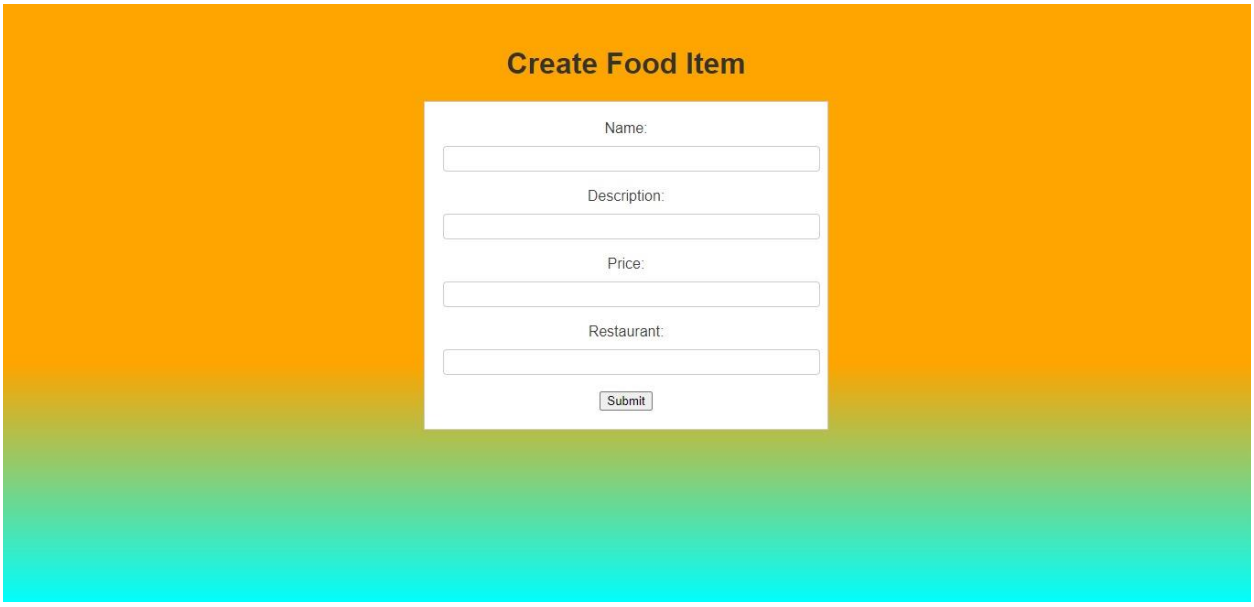

Admin Page
Add Restaurant
ID
Name
Action
Delete

Restaurant Admin page:

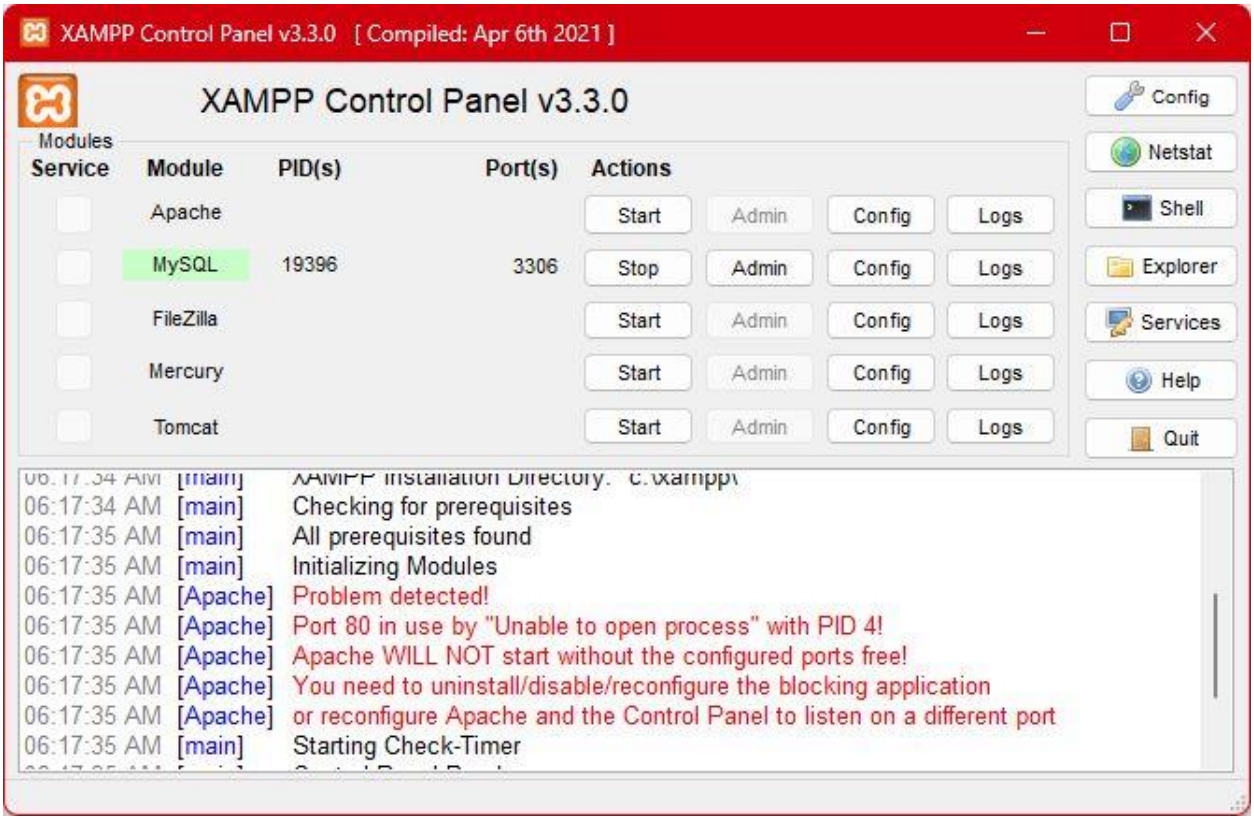





Add Restaurant
Name:
Email:
Username:
Password:
Add Restaurant


Create Food Item
Name:
Description:
Price:
Restaurant:
Submit

MySQL running:



7.<u>ADVANTAGES & DISADVANTAGES</u>:

Advantages :

- ✓ Online food ordering gives customers the freedom and choice to place an order at virtually any time, from anywhere, saving the time and resources typically spent on travelling to pick up a meal.
- ✓ An online ordering system can help restaurants to build and retain customer loyalty. The major reason is that it allows modern-day customers to place an order easily.
- ✓ Customers can re-order their favorite food items without waiting in a big queue. These benefits help restaurants to improve relationships with customers and increase their sales.

Disadvantages :

- ✓ One of the major drawbacks of online food ordering systems is price. When food is ordered for more than one person, the cost is usually equal to eating at a good restaurant every night.
- ✓ Most food ordering systems have a limited number of meals. The menu changes every few weeks or months, but if you stick to the system for more than a few months the menu items will come back again and again.
- ✓ Whether there is harsh rain in the city or the temperature is at its highest boiling point, a delivery man must pick up the order and deliver it to the desired area. It is one of the significant disadvantages that online food delivery mobile app offer to restaurants.
- ✓ Food delivery is that it can cost some money to use those services.
- ✓ While food delivery will be free in most countries if you order for a certain minimum amount of money, you may have to pay for delivery if you just order food for a few bucks.

8.APPLICATIONS:

Software for ordering food online has been created expressly for takeaway, restaurants and sellers of food to go. Customers enjoy the convenience of placing food orders online, thus the practise is swiftly growing. Customers can place orders using computers, tablets, and cellphones by using an online food ordering app. They can browse your menu items, make their selections, and place online orders. Payment will also be made online. Customers can either come and pick up their orders on their own or have their orders delivered. Reducing personnel expenses, walk-away rates, and long lines are advantages of using an online meal ordering service or restaurant ordering app. This multisite food to go chain and independent online ordering system is made for restaurants, cafes & coffee shops, fast food, takeaways, and other catering services.

9.CONCLUSION:

We have successfully implemented the online food ordering system. A food ordering system is a web-based platform that enables users to browse menus, place food orders, and make payments. It is used to improve consumer convenience, streamline the food ordering process, and run restaurants, cafes, delivery services, and other businesses more efficiently. Time savings, greater accessibility, personalized ordering, and effective order management are all benefits of a meal ordering system. It is dependent on internet

connectivity, may lack interpersonal interaction, and may experience technological difficulties. Creating a user-friendly interface for customers to explore menus, customize orders, and make payments is part of the front end of a food ordering system. The back end includes the server-side development that manages database operations, inventory management, and order processing. Connecting the system to payment gateways, third-party services, and delivery tracking APIs is known as integration. Packaging application components into containers (like Docker) for portability and scalability is known as containerization. When an application is deployed to Kubernetes clusters, it may be managed and scaled effectively across several containers.

10.FUTURE SCOPE:

- The food ordering process easier for customers as well as for restaurant owners.
- Easy order management
- Less processing time means less waiting time for food orders.
- Live order tracking.
- It is very easy to customize the food order.
- Improve the user interface by include more interactive features for the user.

More and more restaurants are using mobile platforms for food ordering. This means competitiveness is high in the market. As a result, the price of food gets lowered, and it is a blessing for the customers. With the online mobile payment feature ordering food using restaurant based apps has become easier these days. There occurs no requirement to make use of cash. One can order food online using online payment modes right from the restaurant ordering app. Mobile apps developed to provide food ordering dedicatedly is now a raging trend for all mobile users. With more than 2 billion mobile users, an app is today the best way to promote the restaurant.

11. BIBILOGRAPHY:

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[3] Wang, Xiaogang, Peng Song, and Lingli Li. "Research and Application of Intelligent Voice Food Ordering System." 2020 8th International Conference on Orange Technology (ICOT). IEEE, 2020.
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[8] Ferdianto, Ferdianto, Hanny Juwitasary, and Dimitrij Fajar Satria Dharma. "Development of Mobile Application for Pre Order Food and Beverage." 2021 International Conference on Information Management and Technology (ICIMTech). Vol. 1. IEEE, 2021.
[9] Hongzhen, X. U., Tang Bin, and Song Wenlin. "Wireless food ordering system based on web services." 2009 Second International Conference on Intelligent Computation Technology and Automation. Vol. 4. IEEE, 2009.
[10] Patel, Keyurkumar J., Umesh Patel, and Andrew Obersnel. "PDA-based wireless food ordering system for hospitality industry—A case atudy of Box Hill Institute." 2007 Wireless Telecommunications Symposium. IEEE, 2007.

APPENDIX:

SOURCE CODE

Google Drive link:

https://drive.google.com/drive/folders/1OQT05pRDNBK13PFe-Oq2Wdqxkwzq12OX